
**WATER QUALITY ASSESSMENT: THE EFFECTS OF
LAND USE AND LAND COVER IN URBAN AND
AGRICULTURAL LAND**

Natural Resources and Environmental Sciences (NRES)

Kansas S S 5.2262(s) 2018 0 e

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Precision conservation, although related to the field of precision agriculture, has a broader scope

isolates habitats by destroying crucial corridors,

(Figure 1.5 A Basic HACH Kit)

Statistical Analysis

All subwatersheds were delineated using ArcGIS software. A tool was created that determines the geographic region contributing to a given point

$t = 1.5618, df = 22.908, p\text{-value} = 0.1321$
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
-0.3264524, 2.3362563
sample estimates:
mean of x mean of y
1.5882353, 0.5833333
Nitrogen levels were not statistically different.

5. *Turbidity*

$t = -1.4023, df = 23.11, p\text{-value} = 0.1741$
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
-26.82951, 5.14769
sample estimates:
mean of x mean of y
21.25000, 32.09091
Turbidity levels were not statistically different.

6. *E Td ()*

$t = 1.7653, df = 27.764, p\text{-value} = 0.08851$

Nutrients are more rich in certain areas due to different land uses that take place. An agricultural

water being present. The higher amounts of runoff created a higher sediment load, which contributed to the higher turbidity numbers.

Future research for this project should consist of more of a citizen science approach in urban

References:

subwatersheds of the Mackinaw River, Illinois. *Journal of Environmental Quality*, 40(4), 1215-28.